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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/682,293	10/09/2003	Eric Teller	Auto-Journal-US	9347
87084 7590 01/12/2011 GTC Law Group LLP & Affiliates P.O. Box 113237 Pittsburgh, PA 15241				
EXAMINER RAJAN, KAI				
ART UNIT 3769		PAPER NUMBER		
NOTIFICATION DATE 01/12/2011		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/682,293

Applicant(s)

TELLER ET AL.

Examiner

Kai Rajan

Art Unit

3769

Period for Reply -- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) 2, 21, 23, 26, 45-95, 97, 99, 120, 123 and 139-170 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 7, 11-15, 24, 25, 31, 33 and 35-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of Papers Received (PTO-322)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/1/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Disposition of Claims: Claims pending in the application are 1,2,7,11-15,21,23-26,31,33,35-39,45-95,97,99,120,123 and 139-170.

DETAILED ACTION

Examiner acknowledges the response filed October 1, 2010.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 1, 2010 has been entered.

Response to Arguments

Applicant's arguments have been considered but are not fully persuasive. Applicant contends Mault fails to disclose automatically determining user context. The Examiner disagrees. Mault discloses using body activity monitors including exertion level detectors to collect data on the exertion level of a user during exercise. The exertion level detector is disclosed by Mault as a heart rate sensor, however Cherry discloses GSR sensors for collecting exertion level data. The microprocessor in Mault uses the collected data to determine the exertion level of the user during exercise, which is then used for determining the user's caloric balance. Exertion level is a type of context since it comprises a quality of the user's activity. Similarly, Applicant defines "context" as being one of "rest" or "active." Determining exertion level is equivalent to identifying "rest" or "active" periods, since very low exertion comprises

rest, and higher exertion comprises activity. Furthermore, Mault discloses using body activity monitors to determine whether the user is resting or inactive (Mault column 5 lines 5 – 9). Therefore, Mault discloses automatic determination of contexts. Since Cherry discloses the use of skin resistance sensors for collecting exertion level data, the applied prior art is sufficient to reject the claim limitation. Since the Examiner applied the prior art under a different interpretation regarding the determination of contexts, this office action is made non-final.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 1 positively recites limitations that overlap statutory classes, such as “a sensor generating a sensor output signal (Claim 1 line 4).” In this case, the applicant has positively recited a method and an apparatus in the same claim. See MPEP 2173.05(p) II. To overcome this rejection the Examiner suggests amending the claim language to read “that generates” or “for generating.”

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 7, 11 – 13, 15, 24, 25, 31, 33, 35 – 37, and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mault U.S. Patent No. 6,571,200 B1, cited by Applicant, in view of Cherry et al. U.S. Patent No. 5,701,894 ("Cherry").

1. An apparatus for deriving a state parameter of an individual, comprising:

a processor;

at least one of a sensor generating a sensor output signal comprising data indicative of the rate of heat flowing off said individual's body, and a sensor for generating a sensor output signal indicative of the resistance of said individual's skin to an electric current, and said sensor output signals being directed to an electronic communication link with said processor (Mault column 4 lines 35 – 39, figure 1 item 12 body activity monitors include exertion detector that collects physiological data such as heart rate, but fails to disclose temperature or skin resistance sensors measuring exertion, see below. Mault column 4 lines 65 – 67, column 5 lines 1 – 19 microprocessor receives data);

wherein said processor automatically determines the context of said individual (Mault column 3 lines 5 – 10, column 4 lines 55 – 67, column 5 lines 1 – 40, column 6 lines 3 – 46, see also figure 2 microprocessor uses heart rate data to determine the exertion level of the user, which comprises a context of the user's activity); and

wherein said processor utilizes said context to predict the energy expenditure of said individual (Mault column 3 lines 5 – 10, column 4 lines 55 – 67, column 5 lines 1 – 40, column 6

lines 3 – 46, see also figure 2 microprocessor uses determined exertion level of the user to calculate the total calories expended).

Mault discloses an exertion level sensor such as a heart rate sensor for collecting physiological data concerning the user's exertion level during exercise. Mault fails to disclose a skin resistance sensor. However Cherry a reference in an analogous art of physiological monitoring teaches using galvanic skin response sensors to collect data indicative of stress, which is an indicative measure of exertion (Cherry column 17 lines 8 – 18). It would have been obvious to one of ordinary skill in the art at the time of the invention to substitute the heart rate sensor of Mault with the GSR sensor of Cherry, since Cherry states that GSR measures stress levels resulting from increased sweat gland activity, which is a measurement of exertion during exercise.

7. An apparatus according to claim 1, wherein said context comprises at least one of a resting and an active state of said individual (Mault column 3 lines 5 – 10, column 4 lines 55 – 67, column 5 lines 1 – 40 microprocessor uses physiological data to determine exertion level, which are measures of the level of rest or activity of an individual).

11. An apparatus according to claim 1, said processor generating caloric consumption data for said individual the apparatus further comprising a display which identifies said caloric expenditure data and said caloric consumption data (Mault column 6 lines 36 – 54 calculated caloric expenditures are output to display devices).

12. An apparatus according to claim 11, further comprising an input device in electronic communication with said processor, said caloric consumption data being determined from information collected by said input device from said individual relating to foods eaten by said individual (Mault column 4 lines 2 – 13 caloric intake input).

13. An apparatus according to claim 11, wherein said displayed information includes energy balance data (Mault column 6 lines 36 – 54 calculated caloric expenditures are output to display devices).

15. An apparatus according to claim 11, wherein said displayed information includes information relating to one or more goals of said individual, said goals relating to the monitoring and status of one or more of caloric consumption, caloric expenditure, energy balance and rate of weight loss or gain for said individual (Mault column 6 lines 36 – 54 calculated caloric expenditures are output to display devices).

22. An apparatus according to said sensors being included in said wearable sensor device (Mault column 2 lines 60 – 64 subject equipped with detectors).

24. An apparatus according to claim 1, said apparatus further comprising a wearable sensor device including said sensors which is mounted on said individual, said processor being included in a computing device located separately from said sensor device, each of said computing device and said sensor device having transmitting and receiving circuitry for

Art Unit: 3769

generating and receiving electronic signals which include said electronic communication link (Mault column 6 lines 36 - 54 discloses transmitting data from the device to other processors).

Column 5 is rejected on substantially the same basis as claim 1.

Claim 31 is rejected on substantially the same basis as claim 7.

Claim 33 is rejected on substantially the same basis as claim 9.

Claim 35 is rejected on substantially the same basis as claim 11.

Claim 36 is rejected on substantially the same basis as claim 12.

Claim 37 is rejected on substantially the same basis as claim 13.

Claim 39 is rejected on substantially the same basis as claim 15.

Claims 14 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mault U.S. Patent No. 6,571,200 B1, cited by Applicant, in view of Cherry et al. U.S. Patent No. 5,701,894 ("Cherry") applied to claims 1, 11, 25, and 35 above, further in view of Karkanen U.S. Patent No. 5,839,901.

Regarding claims 14 and 38, Mault and Cherry disclose a system for monitoring physiological data and outputting information such as caloric balance and expenditure and trend data to promote weight loss. Mault and Cherry fail to disclose displaying information regarding rate of weight loss or gain. However Karkanen a reference in an analogous art of physiological monitoring and weight control discloses calculating and displaying weight change rates (Karkanen see at least figures 12 and 16 with respective figure descriptions in the specification). It would have been obvious to one of ordinary skill in the art at the time of invention to modify the displayed trend and caloric expenditure data of Mault and Cherry with the weight change rate data of Karkanen, since both inventions improve weight loss and weight control, and the features of Karkanen optimize weight loss (Karkanen column 1 lines 6 – 23).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Yamazaki et al. U.S. Patent No. 6,694,182 B1 discloses calculating energy expenditure with increased accuracy by using equations tailored to the particular activity performed by the user.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kai Rajan whose telephone number is (571)272-3077. The examiner can normally be reached on Monday - Friday 9:00AM to 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Johnson can be reached on 571-272-4768. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kai Rajan/
Examiner, Art Unit 3769

/Henry M. Johnson, III/
Supervisory Patent Examiner, Art Unit
3769

March 27, 2010